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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,372

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Florian Straub

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EXAMINER

OKEKE, IZUNNA

ART UNIT

PAPER NUMBER

2432

NOTIFICATION DATE

DELIVERY MODE

04/02/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/510,372	STRAUB ET AL.	
	Examiner	Art Unit	
	IZUNNA OKEKE	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/10/2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 1-25 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments and remarks, the cited reference, Hanna et al, teaches remotely controlling a variety of systems. These systems are listed on pages 4 and 5 including household and industrial appliances. Error messages or control messages transmitted from the systems to a control unit and vice versa contain a validation code known as the authentication value (Page 7) for validating the authenticity and integrity of the message. Depending on the appliance or device being regulated or controlled, this authentication value can be generated or obtained in a number of ways. For example on pages 7 and 8, it can be stored on the device when the device is manufactured. This authentication value is then appended to a control or error message sent from the system and used as a validation code to validate the authenticity of both the sender and the message. This authentication value is valid only once (when attached to a message as a validation code) and expires after the message is validated.

Although Hanna et al. teaches an authentication value appended to a message for validation purposes, Hanna does not explicitly teach this authentication value or validation code

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as a random number which is generated by a random number generator. However, a secondary reference, Hill et al. teaches a method for remotely controlling a system wherein the codes or messages sent between the devices are validated and authenticated by a validation code which is a random number.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 and 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012), and further in view of Hill et al. (US 5191610).

a. Referring to claim 1, 16, 21:

Regarding claim 1, Hanna teaches a method for remotely controlling and/or regulating at least one system, in particular an industrial system (See Hanna, Abstract teaches a method for remotely controlling an industrial appliance), using a communication device which is assigned to the system, wherein a communication is dispatched by the communication device, the communication comprises information relating to the system and a validation code, wherein the information and the validation code are combined in accordance with a first combination rule (See Hanna, Page 7, Line 18-24 teaches a communication dispatched by the device which is a combination of the information and the authentication value),

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and from a message which the communication device receives after the communication has been dispatched a check code is extracted according to a first extraction rule and by means of the validation code and the check code it is checked whether the message originates from a receiver of the communication (See Hanna, Para 7, Line 12-17 teaches a message received from the controller wherein the authentication code from the controller is verified) , and only if the checking is successful, an instruction information according to the first extraction rule is extracted from the message and is implemented by the system (See Hanna, Page 7, Line 24-25 and Page 8, Line 1-5 teaches implementing the code after the verification).

Hanna does not explicitly teach the validation code being variably generated to be valid once for the transmitted message wherein validity information defines the validity code as valid for one time use.

However, Hill teaches a method of remotely controlling a system wherein transmitted messages are added a variable generated random number validation code which is valid once for each transmitted message (See Hill, Col 5, Line 20-44)

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna's message authentication value as taught by Hill to be variably generated and be valid for only one message transmission for the purpose of ensuring data integrity wherein if the authentication value is obtained by unauthorized persons, it wont be used a second time for message authentication as its validity would have expired.

a. Referring to claim 2, 17, 22:

Regarding claim 2, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the validity information is appended to or is prefixed to the validation code (See

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Hill, Col 6, Line 5-18 teaches count information appended to the randomly generated message validation code).

a. Referring to claim 3, 18, 23:

Regarding claim 3, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the validation code is valid once (See Hill, Col 5, Line 20-44..... randomly generated validation code is valid per each transmitted message).

a. Referring to claim 4, 19, 24:

Regarding claim 4, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the validation code is generated by a random number generator (See Hill, Col 5, Line 53-55).

a. Referring to amended claim 5:

Regarding amended claim 5, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the validity information is directly added to the validation code, the validation code is transmitted in encrypted form (See Hanna, Page 10, Line 13-16 teaches encrypting the authentication value and the rejection in claim 1 teaches a validity period information), and after decryption of the message or check code in the communications device, the validity information is available again in plain text and the validity information is not stored in the communication device (See Hanna, Page 10, Line 13-16 teaches decrypting the authentication value and making it available in plain form).

a. Referring to claim 6:

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Regarding claim 6, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the validation code itself is encrypted before it is added in accordance with a first combination rule to the communication or message. (See Hanna, Page 10, Line 13-16).

a. Referring to claim 7:

Regarding claim 7, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the check code is transmitted in encrypted form (See Hanna, Page 10, Line 13-21).

a. Referring to amended claim 8, 20, 25:

Regarding amended claim 8, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the receiver of the communication adds, in accordance with a third combination rule, a dispatcher information to the message which he generates (See Hanna, Page 10, Line 16-20 teaches a communication from the controller to the device comprising a dispatcher information such as a model number together with the information), the dispatcher information is extracted from the message in accordance with a third extraction rule, the dispatcher is identified by means of the dispatcher information and stored dispatcher data, only if the checking, as to whether the message originates from a receiver of the communication, is successful and if the identification of the dispatcher is successful, an instruction information is implemented by the system, after the check code and dispatcher information have been extracted from the message, and if the checking and/or the identification of the dispatcher were/was not successful, the instruction information is ignored (See Hanna, Page 14, Line 9-22 teaches extracting the values in the message received from the controller,

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verifying the authenticity of the sender and utilizing the message contained in the communication if the sender is verified to be accurate).

a. Referring to claim 9:

Regarding claim 9, the combination of Hanna and Hill teaches the method as claimed in claim 8, wherein - the dispatcher information contains a secret password or a secret identification number (See Hanna, Page 10, Line 16-20).

a. Referring to claim 10:

Regarding claim 10, the combination of Hanna and Hill teaches the method as claimed in claim 8, wherein the dispatcher information is transmitted in encrypted form (See Hanna, Page 10, Line 16-21 teaches encrypting the information).

a. Referring to claim 11:

Regarding claim 11, the combination of Hanna and Hill teaches the method as claimed in claim 8, wherein the dispatcher information itself is encrypted before it is added to the message in accordance with a third combination rule (See Hanna, Page 10, Line 16-21).

a. Referring to claim 12:

Regarding claim 12, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the entire communication and/or message are encrypted (See Hanna, Page 10, Line 16-20).

a. Referring to claim 14:

Regarding claim 14, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein the message is received via Internet (See Hanna, Page 10, Line 5-11 teaches communication received over the internet).

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a. Referring to newly added claim 15:

Regarding newly added claim 15, the combination of Hanna and Hill teaches the method as claimed in claim 1, wherein when the communication is dispatched, a copy of the validation code is stored so that it is available for the comparison when a message is received later, and the validity information is stored together with the validation code (See Hanna, Page 12, Line 14-17 teaches storing the authentication value received from the communication).

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012) and Hill et al. (US 5191610), and further in view of Silen et al. (US-2002/0045442).

a. Referring to claim 13:

Regarding claim 13, the combination of Hanna and Hill teaches the method as claimed in claim 1 wherein the communication is dispatched or received from one system to another (See Hanna, Page 6 and 7).

Hanna and Hill does not teach communication and/or the message are dispatched and/or received by means of short message service.

However, Silen teaches a communication and/or the message are dispatched and/or received by means of short message service (See Silen, Abstract)

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna and Hill's means of dispatching and receiving control communications as a short message service as taught by Silen for the purpose of expanding the devices used in controlling the system such as the use of a mobile device from any location to control the system.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571)270-3854. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. O./
Examiner, Art Unit 2432

/Benjamin E Lanier/
Primary Examiner, Art Unit 2432